

L Number	Hits	Search Text	DB	Time stamp
1	262	((570/208) or (570/209) or (570/210)).CCLS.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/20 19:58
3	2	((((570/208) or (570/209) or (570/210)).CCLS.) and 2,8-dimethylphenoxythiin	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/20 19:59
2	10	2,8-dimethylphenoxythiin	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/20 20:03
4	101	chlorotoluene and chloroxylene	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/20 20:04
5	11	(lewis adj acid) and (chlorotoluene and chloroxylene)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/20 20:07
6	209	halogenation same aromatic adj compounds	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/20 20:08
7	48358	(friedel near2 craft) or (lewis adj acid)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/20 20:10
8	66	(halogenation same aromatic adj compounds) and ((friedel near2 craft) or (lewis adj acid))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/20 20:11
9	105438	xylene and toluene	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/20 20:11
10	28	((halogenation same aromatic adj compounds) and ((friedel near2 craft) or (lewis adj acid))) and (xylene and toluene)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/20 20:23
11	0	ring near2 chlorinating near2 xylene	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/20 20:17
12	0	ring near3 chlorinating near3 xylene	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/20 20:17
13	15	ring same chlorinating same xylene	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/20 20:18
14	9	mack-karl-ernst.in. or leitung-hans-jurgen.in. or decker-daniel.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/03/20 20:24

10/659,590

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FULL ESTIMATED COST

SINCE FILE ENTRY	0.21	TOTAL SESSION	0.21
---------------------	------	------------------	------

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STRUCTURE FILE UPDATES: 19 MAR 2004 HIGHEST RN 665776-10-3
DICTIONARY FILE UPDATES: 19 MAR 2004 HIGHEST RN 665776-10-3

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

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Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
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=>Testing the current file.... screen

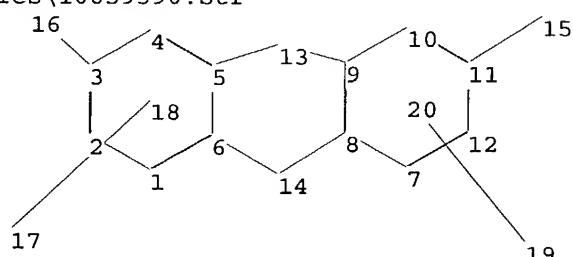
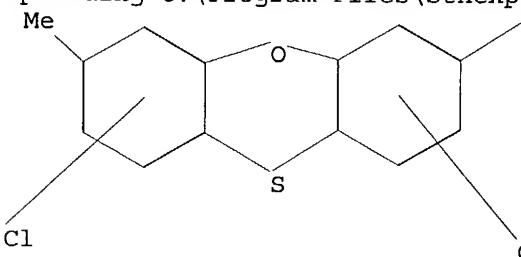
ENTER SCREEN EXPRESSION OR (END) :end

=> screen 964

L1 SCREEN CREATED

⇒

Uploading C:\Program Files\Stnexp\Queries\10659590.str



```
chain nodes :  
15 16 17 19  
ring nodes :
```

10/659,590

1 2 3 4 5 6 7 8 9 10 11 12 13 14
chain bonds :
3-16 11-15
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-13 6-14 7-8 7-12 8-9 8-14 9-10 9-13 10-11
11-12
exact bonds :
3-16 5-13 6-14 8-14 9-13 11-15
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12
isolated ring systems :
containing 1 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 16:CLASS 17:CLASS 18:CLASS
19:CLASS 20:CLASS

L2 STRUCTURE UPLOADED

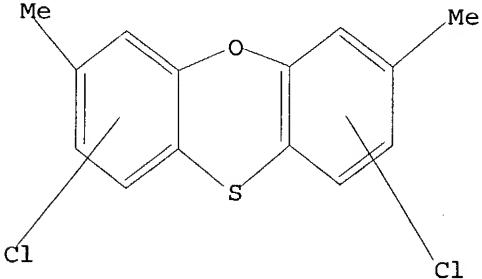
=> que L2 AND L1

L3 QUE L2 AND L1

=> d

L3 HAS NO ANSWERS

L1 SCR 964
L2 STR



Structure attributes must be viewed using STN Express query preparation.
L3 QUE L2 AND L1

=> s 13

SAMPLE SEARCH INITIATED 20:40:18 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 7 TO ITERATE

100.0% PROCESSED 7 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 7 TO 298
PROJECTED ANSWERS: 0 TO 0

L4 0 SEA SSS SAM L2 AND L1

10/659,590

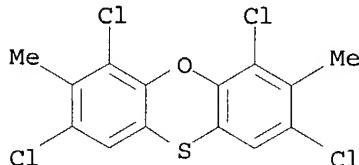
=> s 13 ful
FULL SEARCH INITIATED 20:40:23 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 162 TO ITERATE

100.0% PROCESSED 162 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

L5 1 SEA SSS FUL L2 AND L1

=> d

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
RN 134696-94-9 REGISTRY
CN Phenoxathiin, 2,4,6,8-tetrachloro-3,7-dimethyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C14 H8 Cl4 O S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus		SINCE FILE	TOTAL
COST IN U.S. DOLLARS		ENTRY	SESSION
FULL ESTIMATED COST		157.19	157.40

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FILE COVERS 1907 - 20 Mar 2004 VOL 140 ISS 13
FILE LAST UPDATED: 19 Mar 2004 (20040319/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

10/659,590

=> file chemistry patent

FILE 'ENCOMPLIT' ACCESS NOT AUTHORIZED

FILE 'ENCOMPPAT' ACCESS NOT AUTHORIZED

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FILE 'WPINDEX' ACCESS NOT AUTHORIZED

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=> s 134696-94-9
 46 FILES SEARCHED...
 62 FILES SEARCHED...
L6      1 134696-94-9
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=> d

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN

10/659,590

AN 1991:449067 CAPLUS
DN 115:49067
TI Process for preparing 2-chloro-4-nitro-1-alkylbenzenes
IN Mais, Franz Josef; Fiege, Helmut
PA Bayer A.-G., Germany
SO Eur. Pat. Appl., 28 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 399293	A1	19901128	EP 1990-108778	19900510
	EP 399293	B1	19930901		
	R: BE, CH, DE, FR, GB, IT, LI, NL				
	DE 3916664	A1	19910103	DE 1989-3916664	19890523
	US 5095157	A	19920310	US 1990-518063	19900502
	DD 297957	A5	19920130	DD 1990-340904	19900522
	JP 03020244	A2	19910129	JP 1990-131438	19900523
PRAI	DE 1989-3916664		19890523		
OS	CASREACT	115:49067; MARPAT	115:49067		

=> s 2,8-dimethylphenoxythiin

15 FILES SEARCHED...
27 FILES SEARCHED...
37 FILES SEARCHED...
53 FILES SEARCHED...
60 FILES SEARCHED...
62 FILES SEARCHED...
68 FILES SEARCHED...

L7 31 2,8-DIMETHYLPHENOXYTHIIN

=> s 17 and xylene

42 FILES SEARCHED...
L8 3 L7 AND XYLENE

=> dup rem 18

DUPLICATE IS NOT AVAILABLE IN 'AQUIRE, BIOCOMMERCE, CAOLD, FEDRIP, GENBANK, INVESTTEXT, KOSMET, RDISCLOSURE, STANDARDS, USAN, DGENE, DPCI, PCTGEN, SYNTHLINE'.

ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L8

L9 2 DUP REM L8 (1 DUPLICATE REMOVED)

=> d 1-2 bib ab

L9 ANSWER 1 OF 2 IFIPAT COPYRIGHT 2004 IFI on STN DUPLICATE 1
AN 10547021 IFIPAT;IFIUDB;IFICDB
TI METHOD FOR THE NUCLEAR CHLORINATION OF ORTHO-XYLENE
INF Decker; Daniel, Liederbach a. Ts., DE
Leitung; Hans-Jurgen, Frankfurt, DE
Mack; Karl-Ernst, Wiesbaden, DE
IN Decker Daniel (DE); Leitung Hans-Jurgen (DE); Mack Karl-Ernst (DE)
PAF Clariant GmbH, US
PA Clariant GmbH
AG Clariant Corporation Industrial Property Department, 4000 Monroe Road, Charlotte, NC, 28205, US
PI US 2004054239 A1 20040318
AI US 2003-659590 20030910
PRAI DE 2002-102422249 20020912
FI US 2004054239 20040318

10/659,590

DT Utility; Patent Application - First Publication
FS CHEMICAL
CLMN APPLICATION
CLMN 8
AB A method for the nuclear chlorination of ortho-xylene using a chlorinating agent in the presence of at least one FriedelCrafts catalyst and chloro-substituted 2,8-dimethylphenoxythiin as co-catalyst. The co-catalyst used is preferably tetrachlorinated 2,8-dimethylphenoxythiin, in particular 1,3,7, 9-tetrachloro-2,8-dimethylphenoxythiin of the formula

D R A W I N G

L9 ANSWER 2 OF 2 USPATFULL on STN
AN 81:1089 USPATFULL
TI Transition metal compound
IN Bye, Ashley D., Welwyn Garden City, England
Newton, Alan B., Welwyn Garden City, England
PA Imperial Chemical Industries Limited, London, England (non-U.S. corporation)
PI US 4243782 19810106
AI US 1976-696822 19760616 (5)
PRAI GB 1975-25534 19750616
GB 1976-2697 19760123
DT Utility
FS Granted
EXNAM Primary Examiner: Smith, Edward J.
LREP Cushman, Darby & Cushman
CLMN Number of Claims: 16
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1592

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A reaction product of a transition metal compound, for example titanium tetrachloride, and an organo-compound of a non-transition metal, for example an aluminium dialkyl halide, is treated with a sulphur containing organic compound, in an amount of up to 2.00, preferably up to 1.50 molar relative to the transition metal compound. The mixture is heated to a temperature in the range from 60° C. up to 160° C. Before treating with the sulphur compound, the reaction product can be heated to a temperature of up to 160° C. The Lewis Base compound is a sulphone, a sulphonamide or a fused-ring heterocyclic compound such as phenoxythiin. The product obtained can be used as a component of an olefine polymerization catalyst.

=> d his

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L1 SCREEN 964
L2 STRUCTURE UPLOADED
L3 QUE L2 AND L1
L4 0 S L3
L5 1 S L3 FUL

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FILE 'AGRICOLA, ALUMINIUM, ANABSTR, APOLLIT, AQUIRE, BABS, BIOCOMMERCE, BIOTECHNO, CABA, CAOLD, CAPLUS, CBNB, CEABA-VTB, CEN, CERAB, CIN,

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L6 1 S 134696-94-9
L7 31 S 2,8-DIMETHYLPHENOXATHIIN
L8 3 S L7 AND XYLENE
L9 2 DUP REM L8 (1 DUPLICATE REMOVED)

=> d 17 1-31 ti

L7 ANSWER 1 OF 31 BABS COPYRIGHT 2004 BEILSTEIN MDL on STN
TI 2,8-Dimethylphenoxathien 10-Oxide

L7 ANSWER 2 OF 31 BABS COPYRIGHT 2004 BEILSTEIN MDL on STN
TI Evidence for Intramolecular Hydrogen Bonding in β -Alanine Derivatives of 2,8-Dimethylphenoxathien 4,6-Dicarboxylic Acid. Model Studies for Nucleation of Parallel β -Sheets

L7 ANSWER 3 OF 31 BABS COPYRIGHT 2004 BEILSTEIN MDL on STN
TI Macrocycles Containing Alanine and Phenoxathien, Synthesis and Conformation in Solution

L7 ANSWER 4 OF 31 CAPLUS COPYRIGHT 2004 ACS on STN
TI 2,8-Dimethylphenoxathien 10-oxide

L7 ANSWER 5 OF 31 CAPLUS COPYRIGHT 2004 ACS on STN
TI Electronic Effect on Rhodium Diphosphine Catalyzed Hydroformylation: The Bite Angle Effect Reconsidered

L7 ANSWER 6 OF 31 CAPLUS COPYRIGHT 2004 ACS on STN
TI Electronic effects in the nickel-catalyzed hydrocyanation of styrene applying chelating phosphorus ligands with large bite angles

L7 ANSWER 7 OF 31 CAPLUS COPYRIGHT 2004 ACS on STN
TI A Modular Approach to Polymer Architecture Control via Catenation of Prefabricated Biomolecular Segments: Polymers Containing Parallel β -Sheets Templatized by a Phenoxathien-Based Reverse Turn Mimic

L7 ANSWER 8 OF 31 CAPLUS COPYRIGHT 2004 ACS on STN
TI Evidence for Intramolecular Hydrogen Bonding in β -Alanine Derivatives of 2,8-Dimethylphenoxathien 4,6-Dicarboxylic Acid. Model Studies for Nucleation of Parallel β -Sheets

L7 ANSWER 9 OF 31 CAPLUS COPYRIGHT 2004 ACS on STN
TI Parallel β -sheet conformation in macrocycles

L7 ANSWER 10 OF 31 CAPLUS COPYRIGHT 2004 ACS on STN
TI Ring-chlorination of toluene

L7 ANSWER 11 OF 31 DISSABS COPYRIGHT (C) 2004 ProQuest Information and Learning Company; All Rights Reserved on STN
TI Nanostructure formation through beta-sheet self-assembly in silk-based multiblock copolymers

L7 ANSWER 12 OF 31 DISSABS COPYRIGHT (C) 2004 ProQuest Information and Learning Company; All Rights Reserved on STN
TI TEMPLATED PARALLEL BETA-SHEETS IN HYBRID-PEPTIDE POLYAMIDES (PHENOXATHIIN DIACID)

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TIEN 2,8-Dimethylphenoxathien 10-oxide

10/659,590

L7 ANSWER 14 OF 31 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
TI 2,8-dimethylphenoxythiin 10-oxide

L7 ANSWER 15 OF 31 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
TI EVIDENCE FOR INTRAMOLECULAR HYDROGEN-BONDING IN BETA-ALANINE DERIVATIVES
OF 2,8-DIMETHYLPHENOXYTHIIN 4,6-DICARBOXYLIC
ACID - MODEL STUDIES FOR NUCLEATION OF PARALLEL BETA-SHEETS

L7 ANSWER 16 OF 31 CASREACT COPYRIGHT 2004 ACS on STN
TI Ring-chlorination of toluene

L7 ANSWER 17 OF 31 EUROPATFULL COPYRIGHT 2004 WILA on STN
TIEN Process for the hydrodechlorination of nuclear chlorinated
ortho-xlenes.

L7 ANSWER 18 OF 31 IFIPAT COPYRIGHT 2004 IFI on STN
TI METHOD FOR THE NUCLEAR CHLORINATION OF ORTHO-XYLENE

L7 ANSWER 19 OF 31 IFIPAT COPYRIGHT 2004 IFI on STN
TI PROCESS FOR RING-CHLORINATING TOLUENE

L7 ANSWER 20 OF 31 PATDPAFULL COPYRIGHT 2004 DPMA on STN
TI Neue Phosphine und Verfahren zu ihrer Herstellung

L7 ANSWER 21 OF 31 PATDPAFULL COPYRIGHT 2004 DPMA on STN
TI Verfahren zur Herstellung von Aldehyden

L7 ANSWER 22 OF 31 USPATFULL on STN
TI Method for the nuclear chlorination of ortho-xylene

L7 ANSWER 23 OF 31 USPATFULL on STN
TI Benzothioxepanone and benzothioxepane thione compounds

L7 ANSWER 24 OF 31 USPATFULL on STN
TI Process for the preparation of chloro-alkylbenzenes and novel
cocatalysts therefor

L7 ANSWER 25 OF 31 USPATFULL on STN
TI Process for the preparation of chloro-alkylbenzenes and novel
cocatalysts therefor

L7 ANSWER 26 OF 31 USPATFULL on STN
TI Process for ring-chlorinating toluene

L7 ANSWER 27 OF 31 USPATFULL on STN
TI Transition metal compound

L7 ANSWER 28 OF 31 USPATFULL on STN
TI Cyclic sulphur compounds

L7 ANSWER 29 OF 31 USPATFULL on STN
TI Cyclic sulphur compounds triazolyl substituted phenoxythiin 10, 10
dioxides

L7 ANSWER 30 OF 31 USPATFULL on STN
TI Cyclic sulphur compounds

L7 ANSWER 31 OF 31 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
TI Nucleus chlorination of toluene with lewis acid catalyst - and
chlorination prod. of 2,6-di methyl-phenoxythiin as co-catalysts.

10/659,590

=> d 1,4,13,14,17,18,22,25 bib ab
2 ANSWERS ARE AVAILABLE. SPECIFIED ANSWER NUMBER EXCEEDS ANSWER SET SIZE
The answer numbers requested are not in the answer set.
ENTER ANSWER NUMBER OR RANGE (1):17
ANSWER NUMBERS NOT CORRECTLY SPECIFIED
Enter an answer number, Example: 10
several answer numbers, Example: 3,7,10
a range of answer numbers, Example: 5-10
or a combination of these. Example: 3,7,9-10,15
ENTER ANSWER NUMBER OR RANGE (1):end

=> d his

(FILE 'HOME' ENTERED AT 20:39:44 ON 20 MAR 2004)

FILE 'REGISTRY' ENTERED AT 20:39:57 ON 20 MAR 2004

L1 SCREEN 964
L2 STRUCTURE UPLOADED
L3 QUE L2 AND L1
L4 0 S L3
L5 1 S L3 FUL

FILE 'CAPLUS' ENTERED AT 20:40:37 ON 20 MAR 2004

FILE 'AGRICOLA, ALUMINIUM, ANABSTR, APOLLIT, AQUIRE, BABS, BIOCOMMERCE, BIOTECHNO, CABA, CAOLD, CAPLUS, CBNB, CEABA-VTB, CEN, CERAB, CIN, COMPENDEX, CONFSCI, COPPERLIT, CORROSION, DISSABS, ENCOMPLIT2, FEDRIP, GENBANK, INSPEC, INSPHYS, INVESTTEXT, IPA, ...' ENTERED AT 20:40:55 ON 20 MAR 2004

L6 1 S 134696-94-9
L7 31 S 2,8-DIMETHYLPHENOXATHIIN
L8 3 S L7 AND XYLENE
L9 2 DUP REM L8 (1 DUPLICATE REMOVED)

=> d 17 1,4,13,14,17,18,22,25 bib ab

L7 ANSWER 1 OF 31 BABS COPYRIGHT 2004 BEILSTEIN MDL on STN
AN 6156405 BABS
TI 2,8-Dimethylphenoxathiin 10-Oxide
AU Bennett, Stephen R.; Kennedy, Alan R.; Khalaf, Abedawn I.; Waigh, Roger D.
SO Acta Crystallogr. Sect.C: Cryst.Struct.Commun. (1998), 54(10), 1511 - 1513
CODEN: ACSCEE
DT Journal
LA English
SL English
AB An important precursor to biologically active compounds, 2, 8-dimethylphenoxathiin 10-oxide (C₁₄H₁₂O₂S), is found to adopt a folded geometry. The dihedral angles between the aromatic rings are 11.8(2) and 15.4(2) deg for the two independent molecules, with the S atoms lying out of the ring planes.

L7 ANSWER 4 OF 31 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:722039 CAPLUS
DN 129:337870
TI 2,8-Dimethylphenoxathiin 10-oxide
AU Bennett, Stephen R.; Kennedy, Alan R.; Khalaf, Abedawn I.; Waigh, Roger D.
CS Dep. Pharmaceutical Sciences, Univ. Strathclyde, Glasgow, G1 1XW, UK
SO Acta Crystallographica, Section C: Crystal Structure Communications (1998), C54(10), 1511-1513
CODEN: ACSCEE; ISSN: 0108-2701

10/659,590

PB Munksgaard International Publishers Ltd.
DT Journal
LA English
AB An important precursor to biol. active compds., 2,8-dimethylphenoxythiin 10-oxide (C₁₄H₁₂O₂S), is found to adopt a folded geometry. The dihedral angles between the aromatic rings are 11.8(2) and 15.4(2)° for the two independent mols., with the S atoms lying out of the ring planes. Crystallog. data are given.

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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on STN

AN 1998-0509467 PASCAL

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TIEN 2,8-Dimethylphenoxythiin 10-oxide

AU BENNETT S. R.; KENNEDY A. R.; KHALAF A. I.; WAIGH R. D.

CS Department of Pharmaceutical Sciences, University of Strathclyde, Glasgow G1 1XW, Scotland, United Kingdom; Department of Pure & Applied Chemistry, University of Strathclyde, Glasgow G1 1XL, Scotland, United Kingdom

SO Acta crystallographica. Section C, Crystal structure communications, (1998), 54(p.10), 1511-1513, 12 refs.

ISSN: 0108-2701 CODEN: ACSCEE

DT Journal

BL Analytic

CY Denmark

LA English

AV INIST-5160C, 354000071502470570

AB An important precursor to biologically active compounds, 2,8-dimethylphenoxythiin 10-oxide (C₁₄H₁₂O₂S), is found to adopt a folded geometry. The dihedral angles between the aromatic rings are 11.8 (2) and 15.4 (2)° for the two independent molecules, with the S atoms lying out of the ring planes.

L7 ANSWER 14 OF 31 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
AN 1998:846366 SCISEARCH

GA The Genuine Article (R) Number: 133XJ

TI 2,8-dimethylphenoxythiin 10-oxide

AU Bennett S R (Reprint); Kennedy A R; Khalaf A I; Waigh R D

CS UNIV STRATHCLYDE, DEPT PHARMACEUT SCI, GLASGOW G1 1XW, LANARK, SCOTLAND (Reprint); UNIV STRATHCLYDE, DEPT PURE & APPL CHEM, GLASGOW G1 1XL, LANARK, SCOTLAND

CYA SCOTLAND

SO ACTA CRYSTALLOGRAPHICA SECTION C-CRYSTAL STRUCTURE COMMUNICATIONS, (15 OCT 1998) Vol. 54, Part 10, pp. 1511-1513.

Publisher: MUNKSGAARD INT PUBL LTD, 35 NORRE SOGADE, PO BOX 2148, DK-1016 COPENHAGEN, DENMARK.

ISSN: 0108-2701.

DT Article; Journal

FS PHYS

LA English

REC Reference Count: 12

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB An important precursor to biologically active compounds, 2,8-dimethylphenoxythiin 10-oxide (C₁₄H₁₂O₂S), is found to adopt a folded geometry. The dihedral angles between the aromatic rings are 11.8(2) and 15.4(2)degrees for the two independent molecules, with the S atoms lying out of the ring planes.

L7 ANSWER 17 OF 31 EUROPATFULL COPYRIGHT 2004 WILA on STN

10/659,590

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

AN 1398305 EUROPATFULL ED 20040318 EW 200412 FS OS
TIEN Process for the hydrodechlorination of nuclear chlorinated
ortho-xlenes.
TIDE Verfahren zur Hydrodechlorierung von kernchlorierten ortho-Xylenen.
TIFR Procede pour la deshydrochloration d' ortho-xlenes chlores dans le
noyau.
IN Mack, Karl-Ernst, Dr., Klingenbachstrasse 43, 65207 Wiesbaden, DE;
Decker, Daniel, Dr., Im Kohlruss 27, 65834 Liederbach a. Ts., DE
PA Clariant GmbH, Brueningstrasse 50, 65929 Frankfurt am Main, DE
PAN 2348920
OS MEPA2004023 EP 1398305 A1 0006
SO Wila-EPZ-2004-H12-T1a
DT Patent
LA Anmeldung in Deutsch; Veroeffentlichung in Deutsch
DS R AT; R BE; R BG; R CH; R CY; R CZ; R DE; R DK; R EE; R ES; R FI; R FR;
R GB; R GR; R HU; R IE; R IT; R LI; R LU; R MC; R NL; R PT; R RO; R SE;
R SI; R SK; R TR; R AL; R LT; R LV; R MK
PIT EPA1 EUROPÄISCHE PATENTANMELDUNG
PI EP 1398305 A1 20040317
OD 20040317
AI EP 2003-19808 20030830
PRAI DE 2002-10242223 20020912

L7 ANSWER 18 OF 31 IFIPAT COPYRIGHT 2004 IFI on STN
AN 10547021 IFIPAT; IFIUDB; IFICDB
TI METHOD FOR THE NUCLEAR CHLORINATION OF ORTHO-XYLENE
INF Decker, Daniel, Liederbach a. Ts., DE
Leitung; Hans-Jurgen, Frankfurt, DE
Mack; Karl-Ernst, Wiesbaden, DE
IN Decker Daniel (DE); Leitung Hans-Jurgen (DE); Mack Karl-Ernst (DE)
PAF Clariant GmbH, US
PA Clariant GmbH
AG Clariant Corporation Industrial Property Department, 4000 Monroe Road,
Charlotte, NC, 28205, US
PI US 2004054239 A1 20040318
AI US 2003-659590 20030910
PRAI DE 2002-102422249 20020912
FI US 2004054239 20040318
DT Utility; Patent Application - First Publication
FS CHEMICAL
APPLICATION
CLMN 8
AB A method for the nuclear chlorination of ortho-xylene using a
chlorinating agent in the presence of at least one FriedelCrafts catalyst
and chloro-substituted 2,8-
dimethylphenoxythiin as co-catalyst. The co-catalyst used is
preferably tetrachlorinated 2,8-
dimethylphenoxythiin, in particular 1,3,7, 9-tetrachloro-
2,8-dimethylphenoxythiin of the formula

D R A W I N G

L7 ANSWER 22 OF 31 USPATFULL on STN
AN 2004:71010 USPATFULL
TI Method for the nuclear chlorination of ortho-xylene
IN Mack, Karl-Ernst, Wiesbaden, GERMANY, FEDERAL REPUBLIC OF
Leitung, Hans-Jurgen, Frankfurt, GERMANY, FEDERAL REPUBLIC OF
Decker, Daniel, Liederbach a. Ts., GERMANY, FEDERAL REPUBLIC OF
PA Clariant GmbH (U.S. individual)
PI US 2004054239 A1 20040318

10/659,590

AI US 2003-659590 A1 20030910 (10)
PRAI DE 2002-10242224 20020912
DT Utility
FS APPLICATION
LREP Clariant Corporation, Industrial Property Department, 4000 Monroe Road, Charlotte, NC, 28205
CLMN Number of Claims: 8
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 229
AB A method for the nuclear chlorination of ortho-xylene using a chlorinating agent in the presence of at least one Friedel-Crafts catalyst and chloro-substituted 2,8-dimethylphenoxythiin as co-catalyst. The co-catalyst used is preferably tetrachlorinated 2,8-dimethylphenoxythiin, in particular 1,3,7,9-tetrachloro-2,8-dimethylphenoxythiin of the formula
##STR1##

L7 ANSWER 25 OF 31 USPATFULL on STN
AN 97:31871 USPATFULL
TI Process for the preparation of chloro-alkylbenzenes and novel cocatalysts therefor
IN Krishnamurti, Ramesh, Williamsville, NY, United States
Nagy, Sandor, Grand Island, NY, United States
Smolka, Thomas F., West Seneca, NY, United States
PA Occidental Chemical Corporation, Niagara Falls, NY, United States (U.S. corporation)
PI US 5621153 19970415
AI US 1995-426208 19950421 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Shah, Mukund J.; Assistant Examiner: Wong, King Lit
LREP Cookfair, Arthur S., Fuerle, Richard D.
CLMN Number of Claims: 13
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 522

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process for the para-directed nuclear chlorination of an alkylbenzene, such as toluene, comprises reacting the alkylbenzene with chlorine in the presence of a Lewis acid catalyst and a novel co-catalyst of the formula: ##STR1## where Z is ##STR2##; and R is Cl, Br, F, C_{sub.1} to C_{sub.8} alkyl to C_{sub.1} to C_{sub.8} alkoxy; x and y are each hydrogen, or taken together form a fused cyclopentyl or cyclohexyl ring; n is 0, 1 or 2, with the proviso that when Z is [3], n is 0 or 1.

=> file patent

FILE 'ENCOMPPAT' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

158.84

316.68

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

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FILE 'WPINDEX' ACCESS NOT AUTHORIZED

=> fsearch ep0173222/pn

SEA EP0173222/PN
28 FILES SEARCHED...
L10 7 EP0173222/PN

FSE
*** ITERATION 1 ***

SET SMARTSELECT ON
SET COMMAND COMPLETED

SET HIGHLIGHTING OFF
SET COMMAND COMPLETED

SEL L10 1- PN,APPS
L11 SEL L10 1- PN APPS : 16 TERMS

SEA L11
'APPS' IS NOT A VALID FIELD CODE
'APPS' IS NOT A VALID FIELD CODE
20 FILES SEARCHED...
'APPS' IS NOT A VALID FIELD CODE
L12 21 L11

10/659,590

*** ITERATION 2 ***

SEL L12 1- PN,APPS

L11 SEL L10 1- PN APPS : 17 TERMS

SEA L11

'APPS' IS NOT A VALID FIELD CODE

'APPS' IS NOT A VALID FIELD CODE

22 FILES SEARCHED...

'APPS' IS NOT A VALID FIELD CODE

L12 21 L11

FSORT L12

L13 21 FSO L12

1 Multi-record Family Answers 1-21

0 Individual Records

0 Non-patent Records

SET SMARTSELECT OFF

SET COMMAND COMPLETED

SET HIGHLIGHTING DEF

SET COMMAND COMPLETED

=> d 1-21 ti

L13 ANSWER 1 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN FAMILY 1
TI Ring-chlorination of toluene

L13 ANSWER 2 OF 21 CASREACT COPYRIGHT 2004 ACS on STN DUPLICATE 1
TI Ring-chlorination of toluene

L13 ANSWER 3 OF 21 DPCI COPYRIGHT 2004 THOMSON DERWENT on STN FAMILY 1
TI Nucleus chlorination of toluene with lewis acid catalyst - and
chlorination prod. of 2,6-di methyl-phenoxythiin as co-catalysts.

L13 ANSWER 4 OF 21 ENCOMPPAT2 COPYRIGHT 2004 ELSEVIER ENGINEERING
INFORMATION INC. on STN FAMILY 1
TI NUCLEUS CHLORINATION OF TOLUENE WITH LEWIS ACID CATALYST - AND
CHLORINATION PROD. OF 2,6-DIMETHYL PHENOXYTHIIN AS CO-CATALYSTS

L13 ANSWER 5 OF 21 IFIPAT COPYRIGHT 2004 IFI on STN FAMILY 1
TI PROCESS FOR RING-CHLORINATING TOLUENE

L13 ANSWER 6 OF 21 INPADOC COPYRIGHT 2004 EPO on STN FAMILY DUPLICATE 1
TI TOLUENE RING CHLORINATION.

L13 ANSWER 7 OF 21 INPADOC COPYRIGHT 2004 EPO on STN FAMILY DUPLICATE 1
TI PROCESS FOR RING-CHLORINATING TOLUENE .

L13 ANSWER 8 OF 21 INPADOC COPYRIGHT 2004 EPO on STN FAMILY DUPLICATE 1
TI PROCESS FOR RING-CHLORINATING TOLUENE.

L13 ANSWER 9 OF 21 INPADOC COPYRIGHT 2004 EPO on STN FAMILY DUPLICATE 1
TI PROCESS FOR THE NUCLEAR CHLORINATION OF TOLUENE .

L13 ANSWER 10 OF 21 INPADOC COPYRIGHT 2004 EPO on STN FAMILY DUPLICATE
1
TI PROCESS FOR RING-CHLORINATING TOLUENE.

10/659,590

L13 ANSWER 11 OF 21 INPADOC COPYRIGHT 2004 EPO on STN FAMILY 1 DUPLICATE
TI VERFAHREN ZUR KERNCHLORIERUNG VON TOLUOL.

L13 ANSWER 12 OF 21 INPADOC COPYRIGHT 2004 EPO on STN FAMILY 1 DUPLICATE
TI PROCESSO PARA A CLORACAO NUCLEAR DE TOLUENO .

L13 ANSWER 13 OF 21 INPADOC COPYRIGHT 2004 EPO on STN FAMILY 1 DUPLICATE
TI PROCESS FOR THE NUCLEAR CHLORINATION OF TOLUENE .

L13 ANSWER 14 OF 21 JAPIO (C) 2004 EPO on STN FAMILY 1
TI TOLUENE RING CHLORINATION

L13 ANSWER 15 OF 21 PATDPA COPYRIGHT 2004 DPMA/FIZ KA on STN FAMILY 1
TI (A1) Verfahren zur Kernchlorierung von Toluol

L13 ANSWER 16 OF 21 PATDPA COPYRIGHT 2004 DPMA/FIZ KA on STN FAMILY 1
TI (B1) (A) Verfahren zur Kernchlorierung von Toluol.

L13 ANSWER 17 OF 21 PATDPAFULL COPYRIGHT 2004 DPMA on STN FAMILY
DUPLICATE 1
TI Verfahren zur Kernchlorierung von Toluol

L13 ANSWER 18 OF 21 PATOSDE COPYRIGHT 2004 WILA on STN FAMILY 1
DEA1 OFFENLEGUNGSSCHRIFT
TI Verfahren zur Kernchlorierung von Toluol.

L13 ANSWER 19 OF 21 PATOSEP COPYRIGHT 2004 WILA on STN FAMILY 1
EPA1 EUROPÄISCHE PATENTANMELDUNG
EPB1 EUROPÄISCHE PATENTSCHRIFT
EPLS LEGAL STATUS
TIEN Process for the nuclear chlorination of toluene.
TIEN Process for the nuclear chlorination of toluene.

L13 ANSWER 20 OF 21 USPATFULL on STN FAMILY 1
TI Process for ring-chlorinating toluene

L13 ANSWER 21 OF 21 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN FAMILY 1
TI Nucleus chlorination of toluene with lewis acid catalyst - and
chlorination prod. of 2,6-di methyl-phenoxythiin as co-catalysts.

=> d 20

L13 ANSWER 20 OF 21 USPATFULL on STN FAMILY 1
AN 87:15400 USPATFULL
TI Process for ring-chlorinating toluene
IN Wolfram, Hans, Kelkheim, Germany, Federal Republic of
PA Hoechst Aktiengesellschaft, Frankfurt am Main, Germany, Federal Republic
of (non-U.S. corporation)
PI US 4647709 19870303
AI US 1985-770714 19850829 (6)
PRAI DE 1984-3432095 19840831
DT Utility
FS Granted
LN.CNT 328
INCL INCLM: 570/209.000
INCLS: 570/210.000
NCL NCLM: 570/209.000

10/659,590

NCLS: 570/210.000
IC [4]
ICM: C07C017-12
EXF 570/209; 570/210
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> log y

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